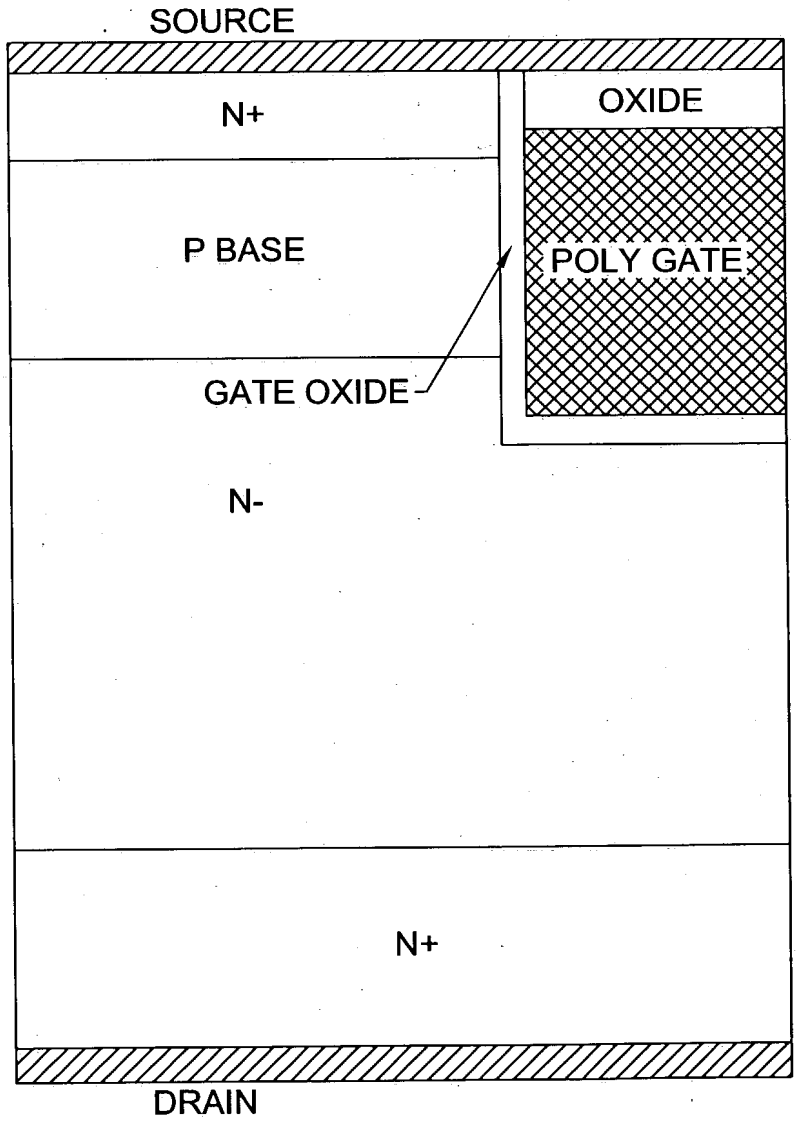


FIG. 1.
(PRIOR ART)

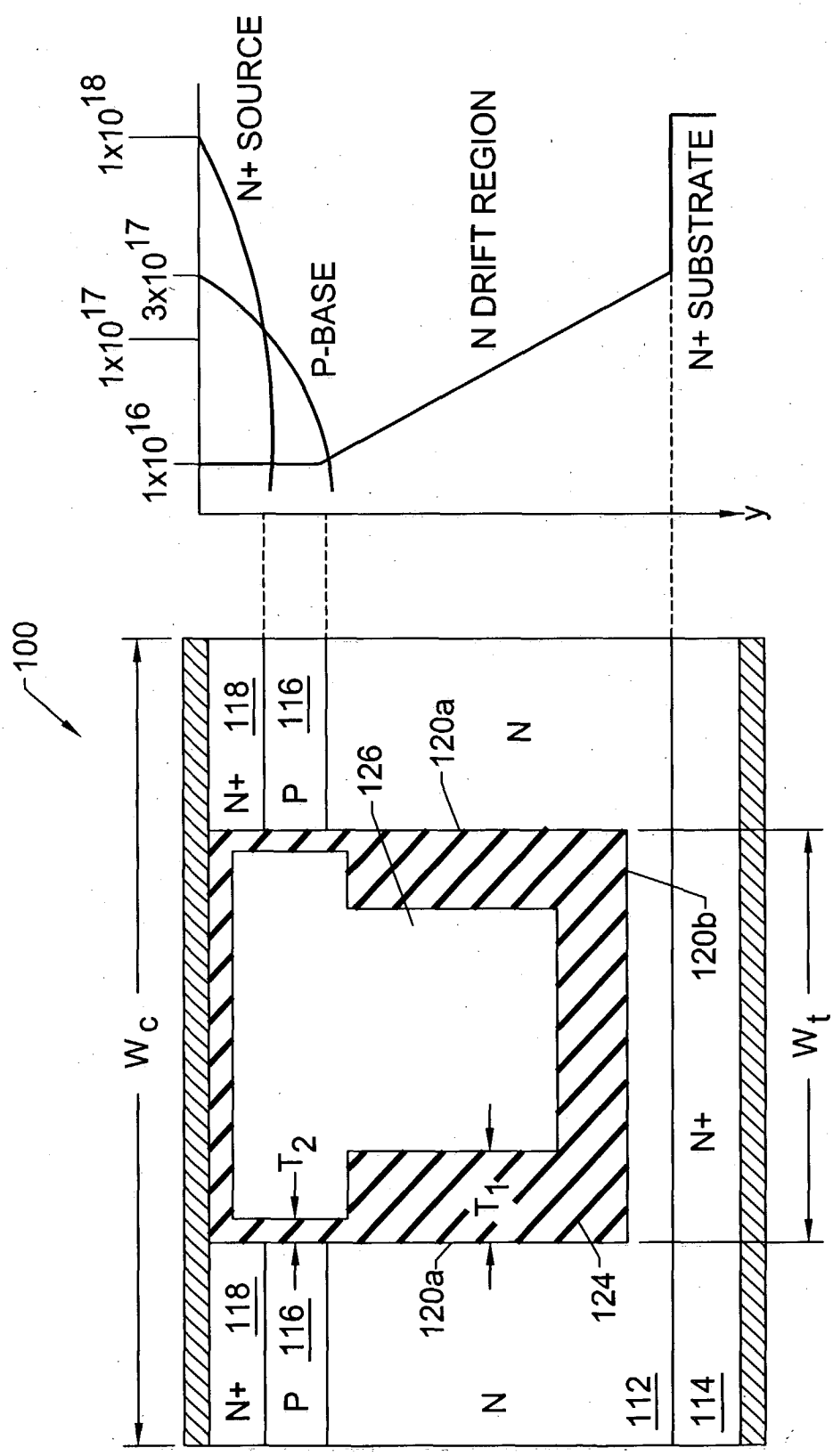


FIG. 2.
(PRIOR ART)

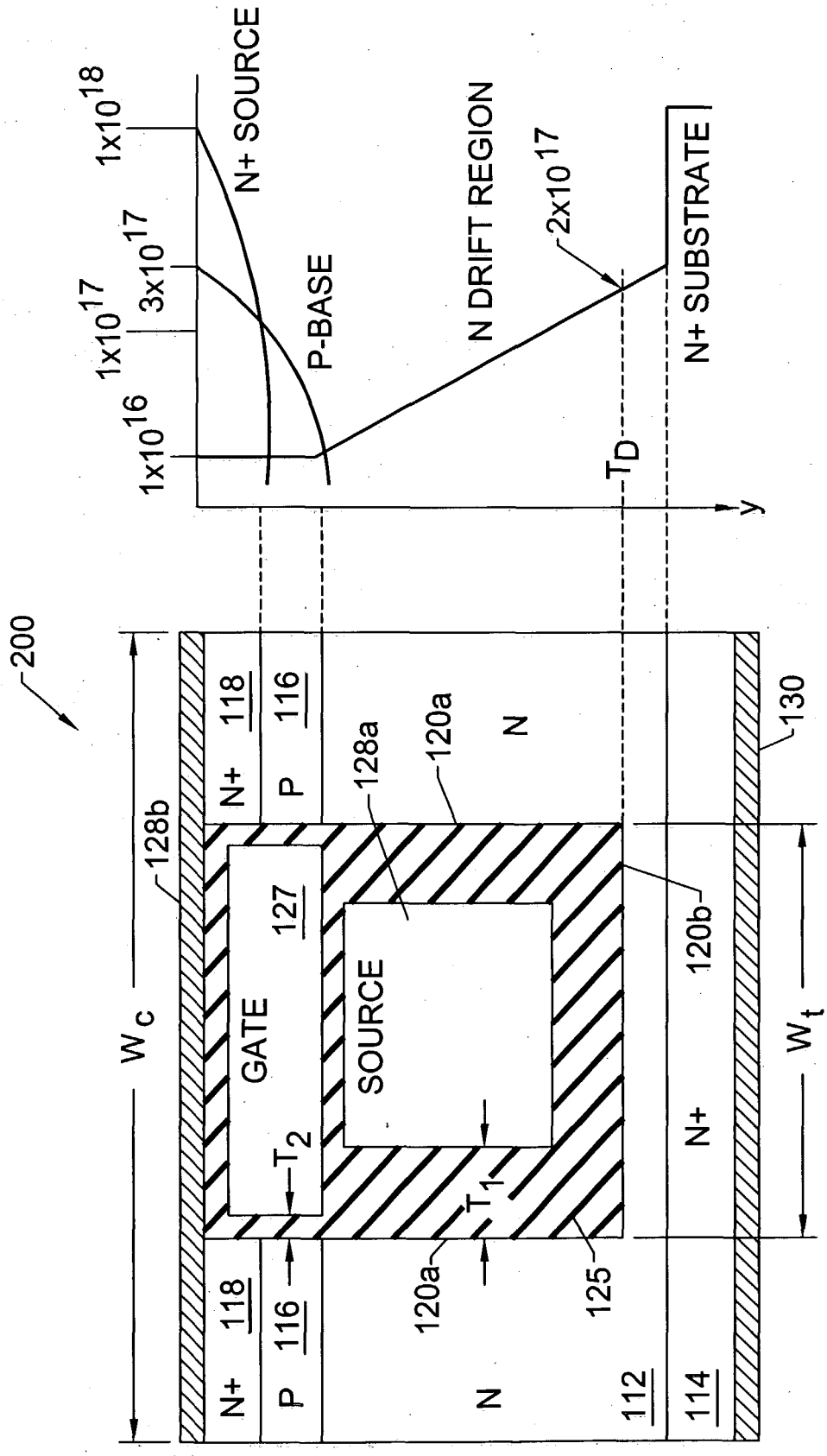

200
1x10^18
N+ SOURCE
3x10^17
1x10^17
P-BASE
1x10^16
N DRIFT REGION
2x10^17
N+ SUBSTRATE
T_D
y
N+ 118
P 116
128a
120a
N
130
128b
GATE 127
SOURCE
120b
W_c
W_t
T_2
T_1
120a
125
N+ 118
P 116
N
112
114

FIG. 3A.

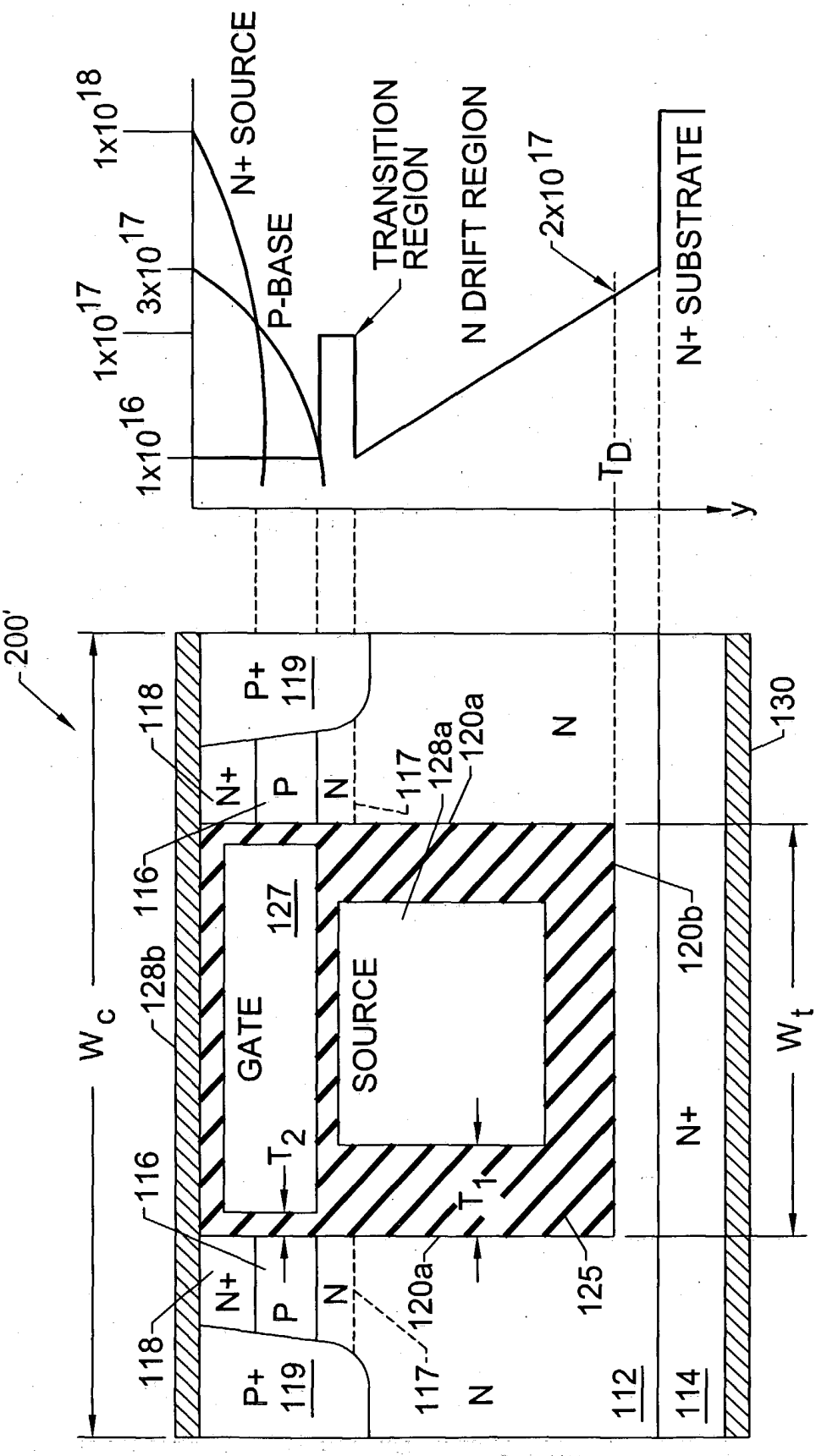

200'
W_c
W_t
118
116
128b
GATE
127
T_2
SOURCE
T_1
P+
119
N+
P
N
117
128a
120a
120b
125
130
112
114
$1x10^{18}$
$3x10^{17}$
$1x10^{17}$
$1x10^{16}$
$2x10^{17}$
N+ SOURCE
P-BASE
TRANSITION REGION
N DRIFT REGION
N+ SUBSTRATE
T_D
y

FIG. 3B.

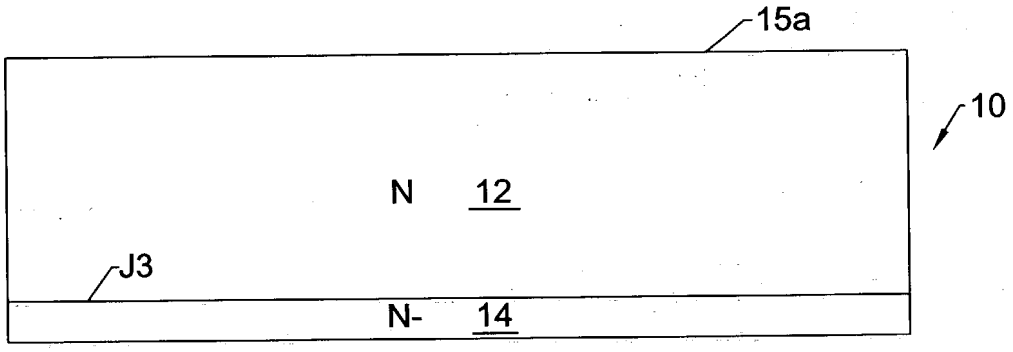


FIG. 4A.

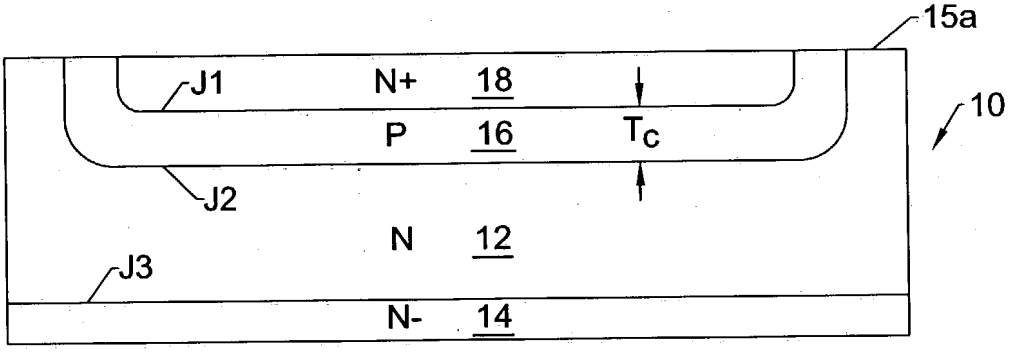


FIG. 4B.

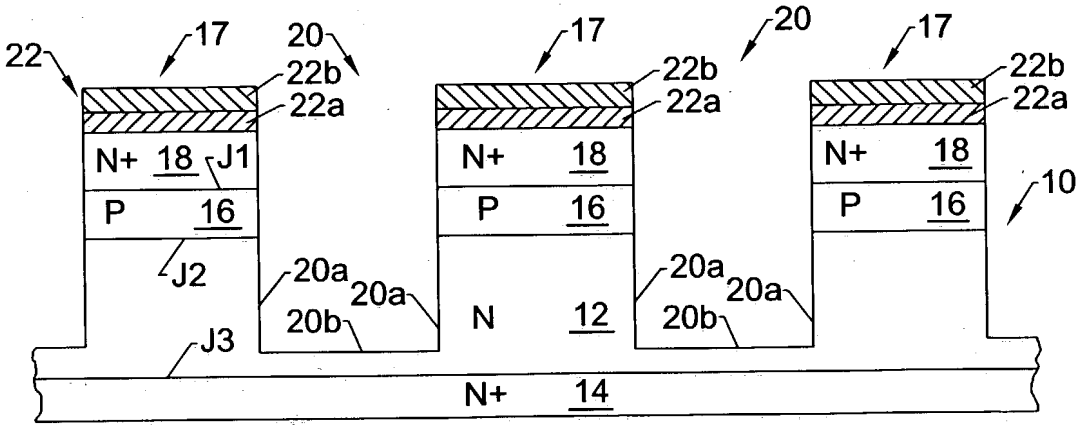


FIG. 4C.

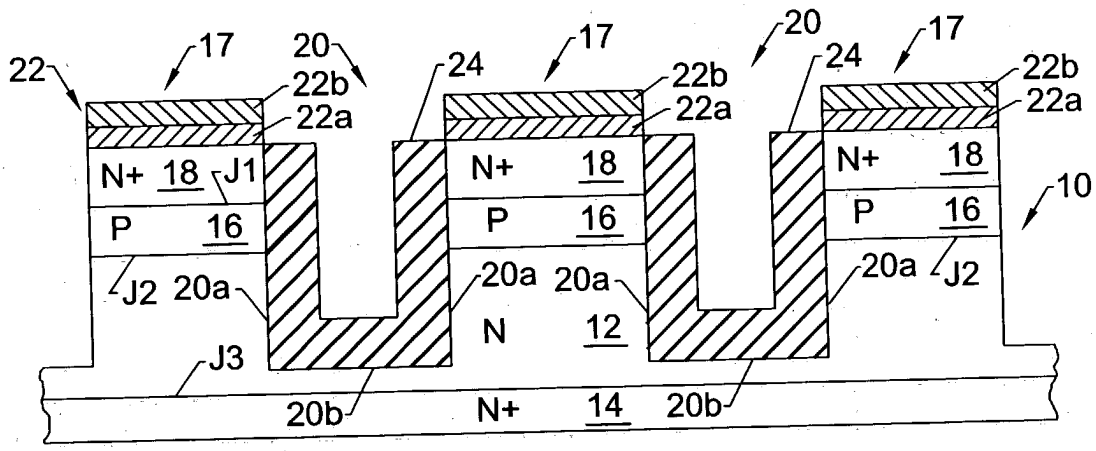


FIG. 4D.

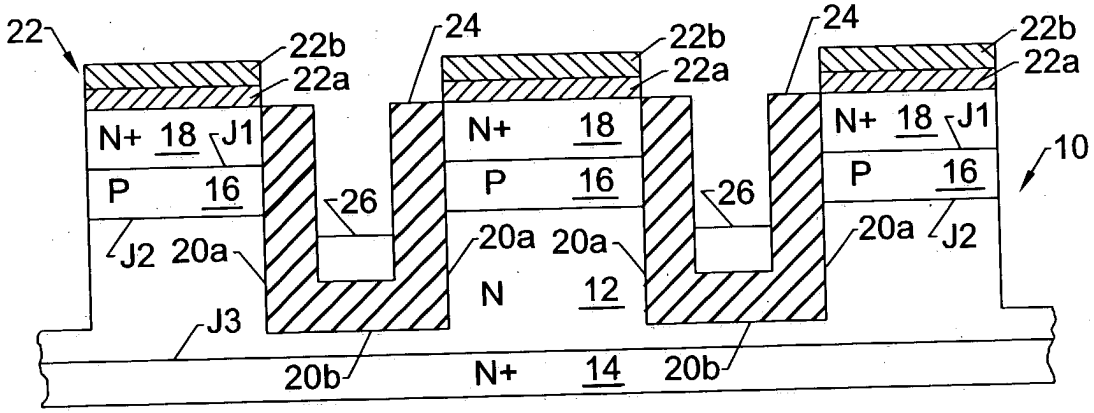


FIG. 4E.

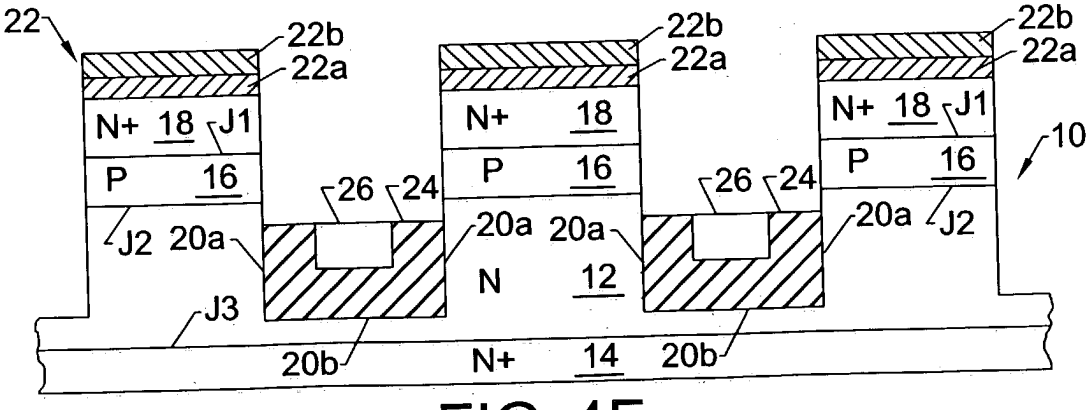


FIG. 4F.

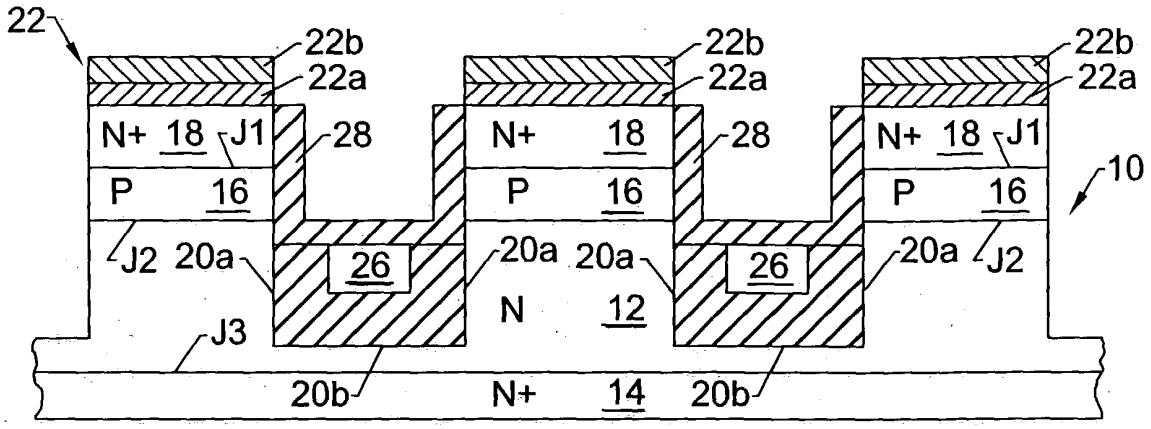


FIG. 4G.

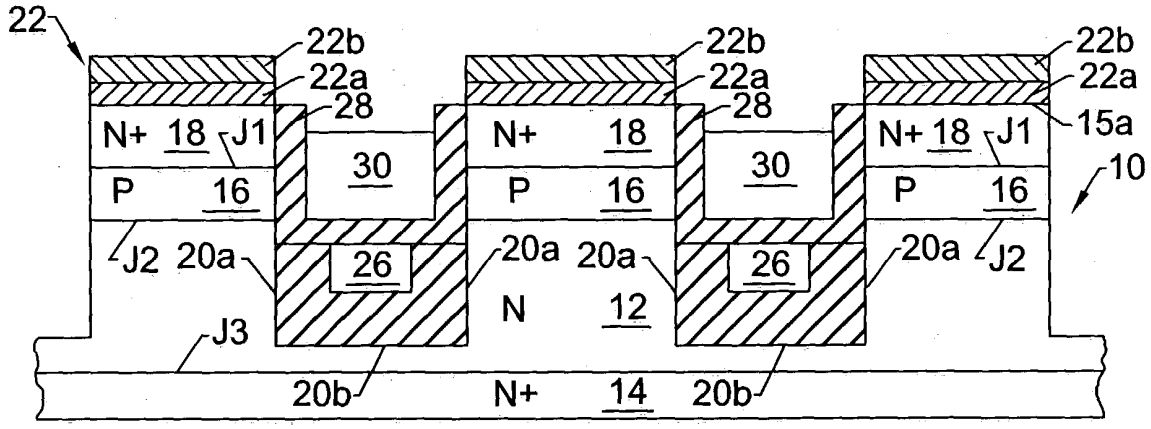


FIG. 4H.

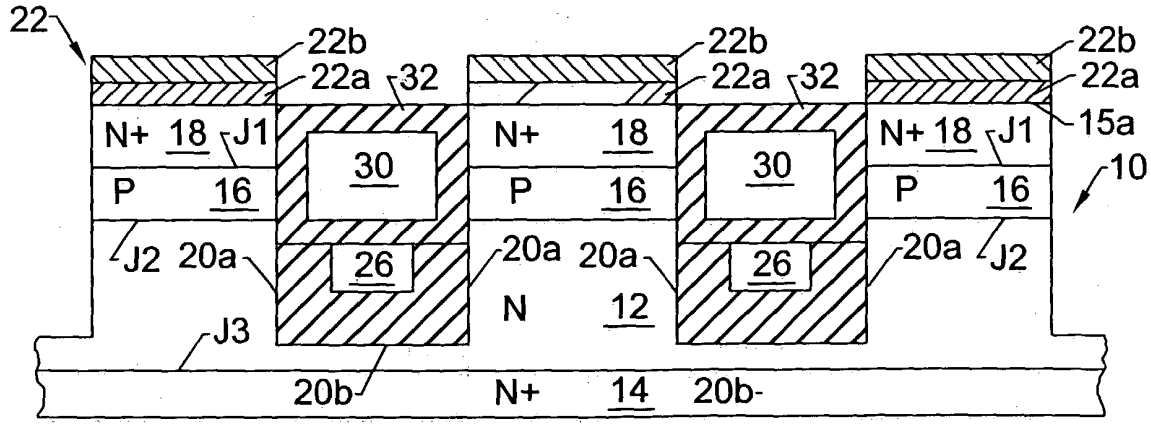


FIG. 4I.

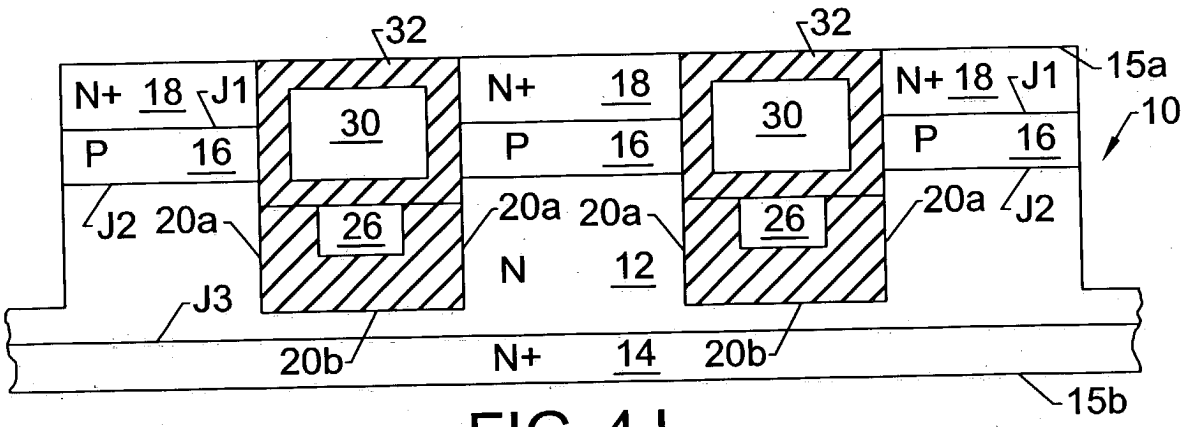

32
32
15a
10
N+ 18 J1
30
N+ 18
30
N+ 18 J1
P 16
P 16
P 16
J2 20a
26
20a 20a
26
20a J2
N 12
J3
20b
N+ 14
20b
15b

FIG. 4J.

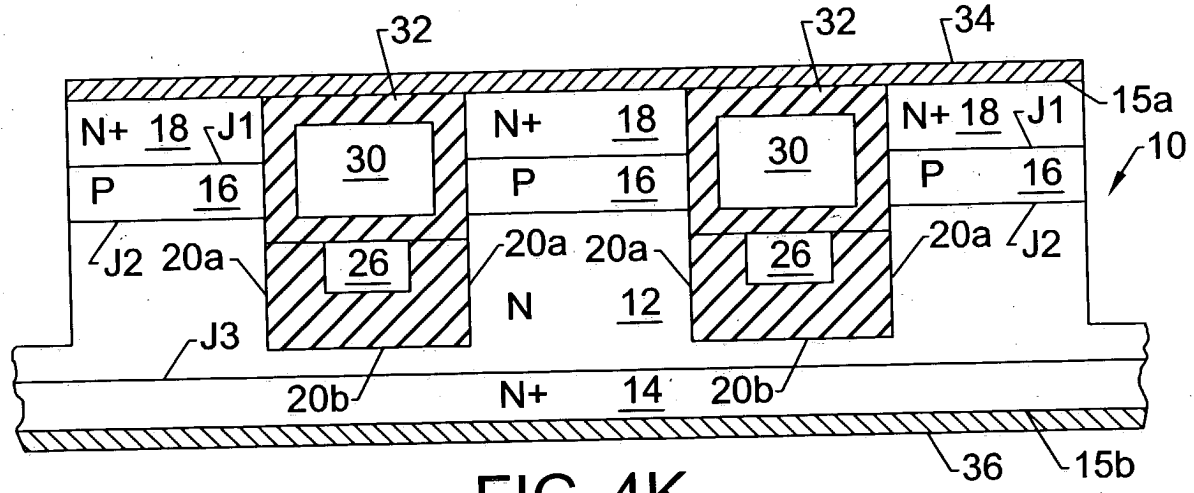

32
32
34
15a
10
N+ 18 J1
30
N+ 18
30
N+ 18 J1
P 16
P 16
P 16
J2 20a
26
20a 20a
26
20a J2
N 12
J3
20b
N+ 14
20b
36
15b

FIG. 4K.

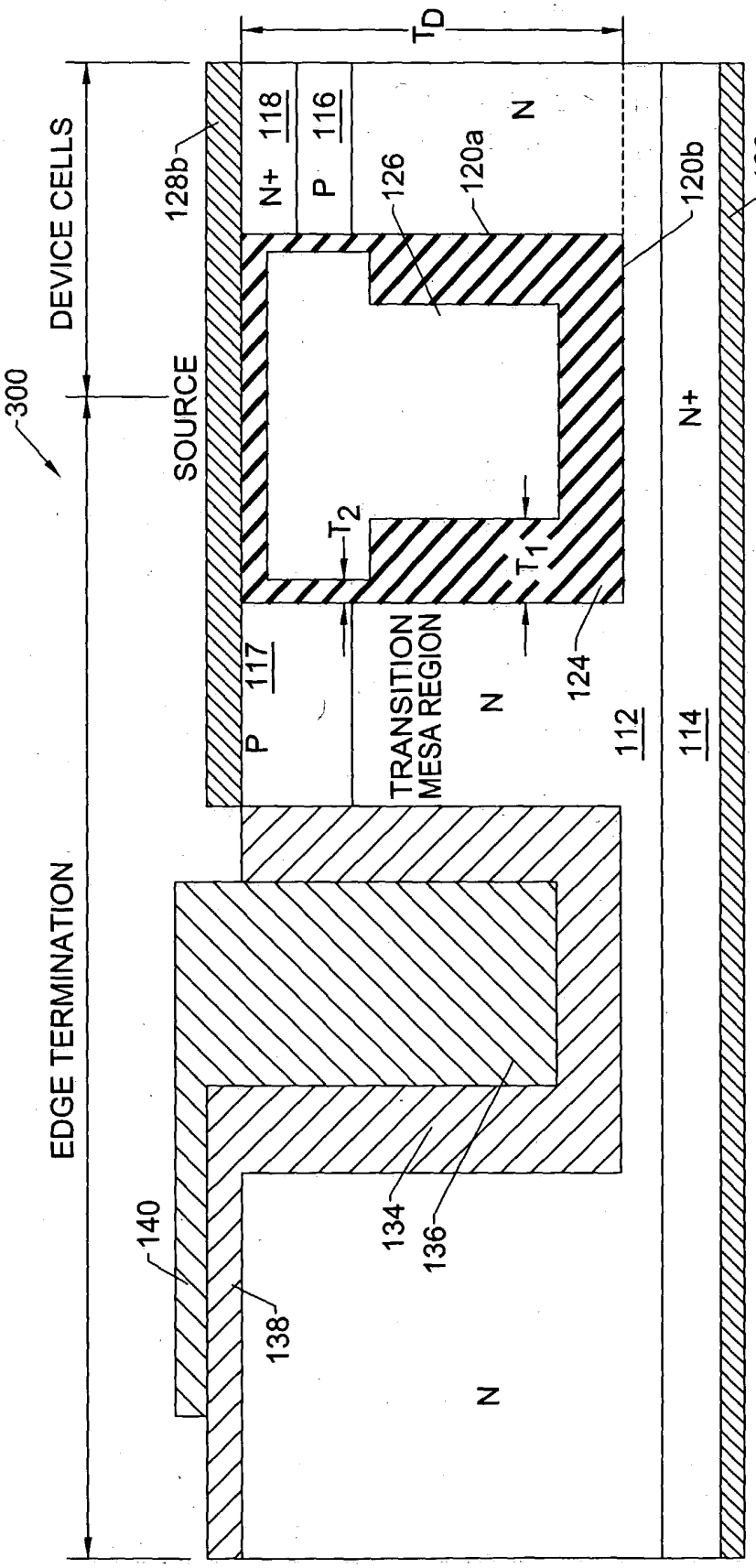

T_D
DEVICE CELLS
EDGE TERMINATION
300
SOURCE
DRAIN
128b
N+ 118
P 116
N
126
120a
120b
130
T_2
T_1
P 117
TRANSITION MESA REGION
N
124
112
114
N+
140
138
134
136
N

FIG. 5.

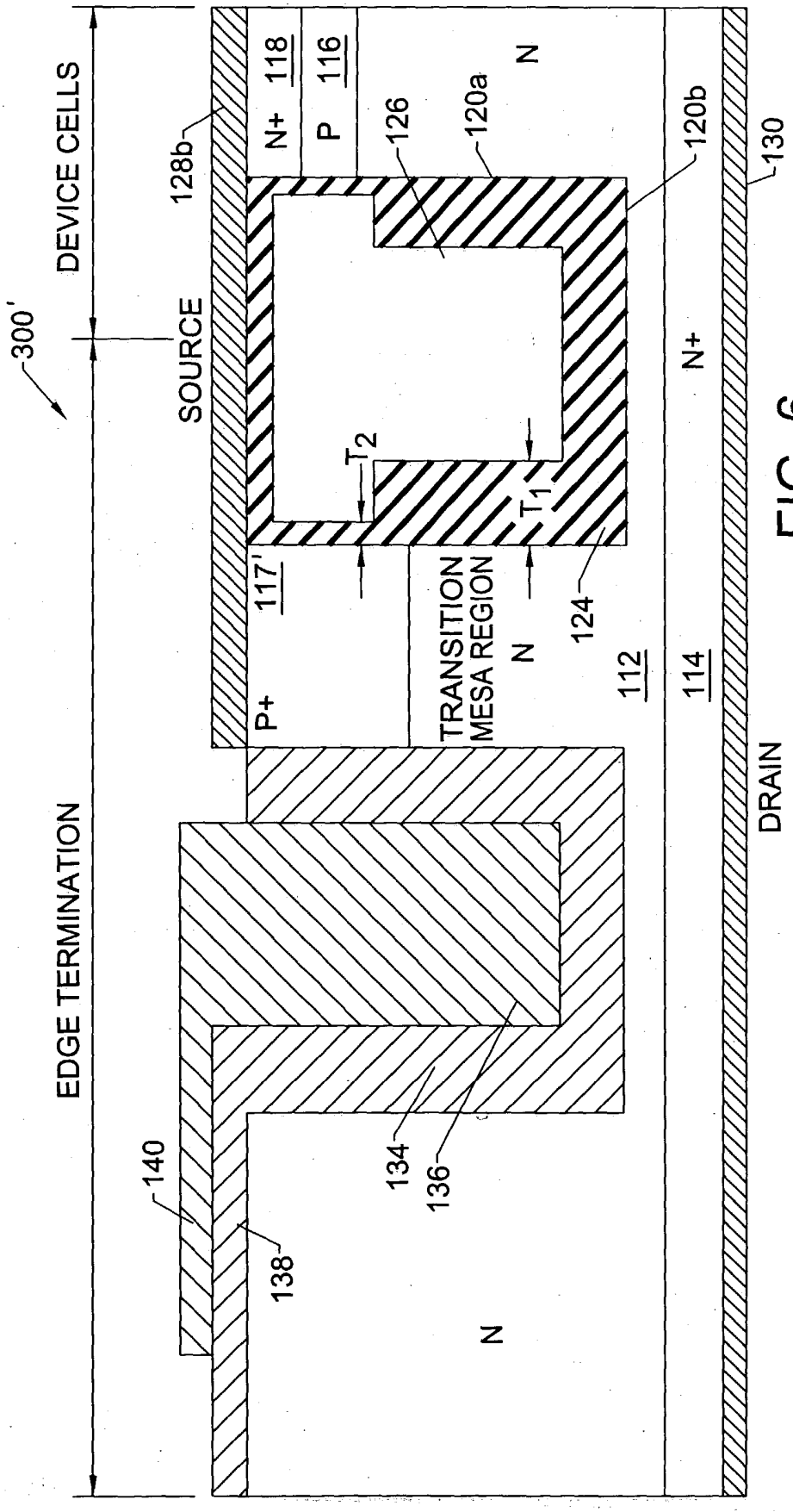

300'
DEVICE CELLS
EDGE TERMINATION
SOURCE
DRAIN
N+ 118
P 116
N
128b
126
120a
120b
130
N+
T2
T1
117'
P+
TRANSITION
MESA REGION
N
124
112
114
140
134
136
138
N

FIG. 6.

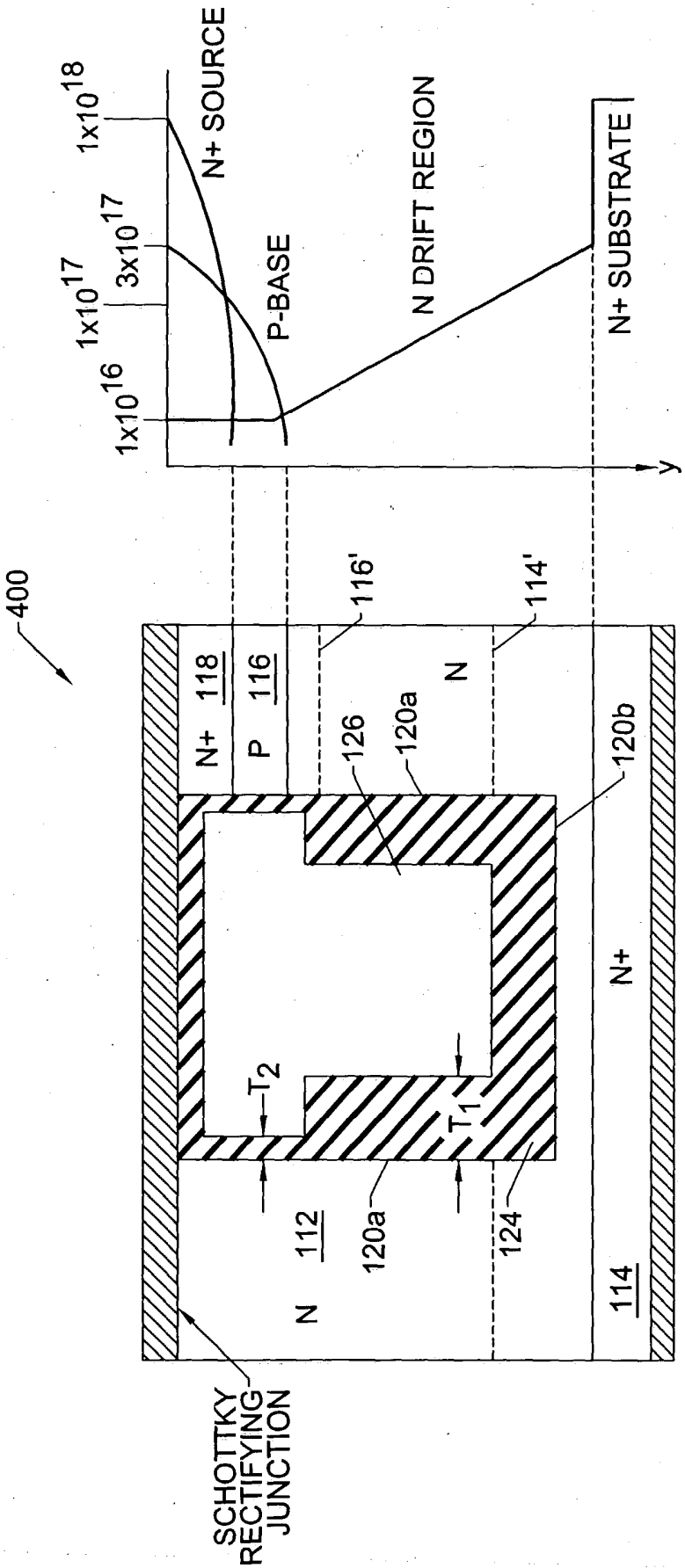

400
1x10^18
1x10^17
3x10^17
1x10^16
N+ SOURCE
P-BASE
N DRIFT REGION
N+ SUBSTRATE
y
116'
114'
N+ 118
P 116
N
126
120a
120b
T2
T1
N 112
120a
124
N+
114
SCHOTTKY RECTIFYING JUNCTION

FIG. 7.

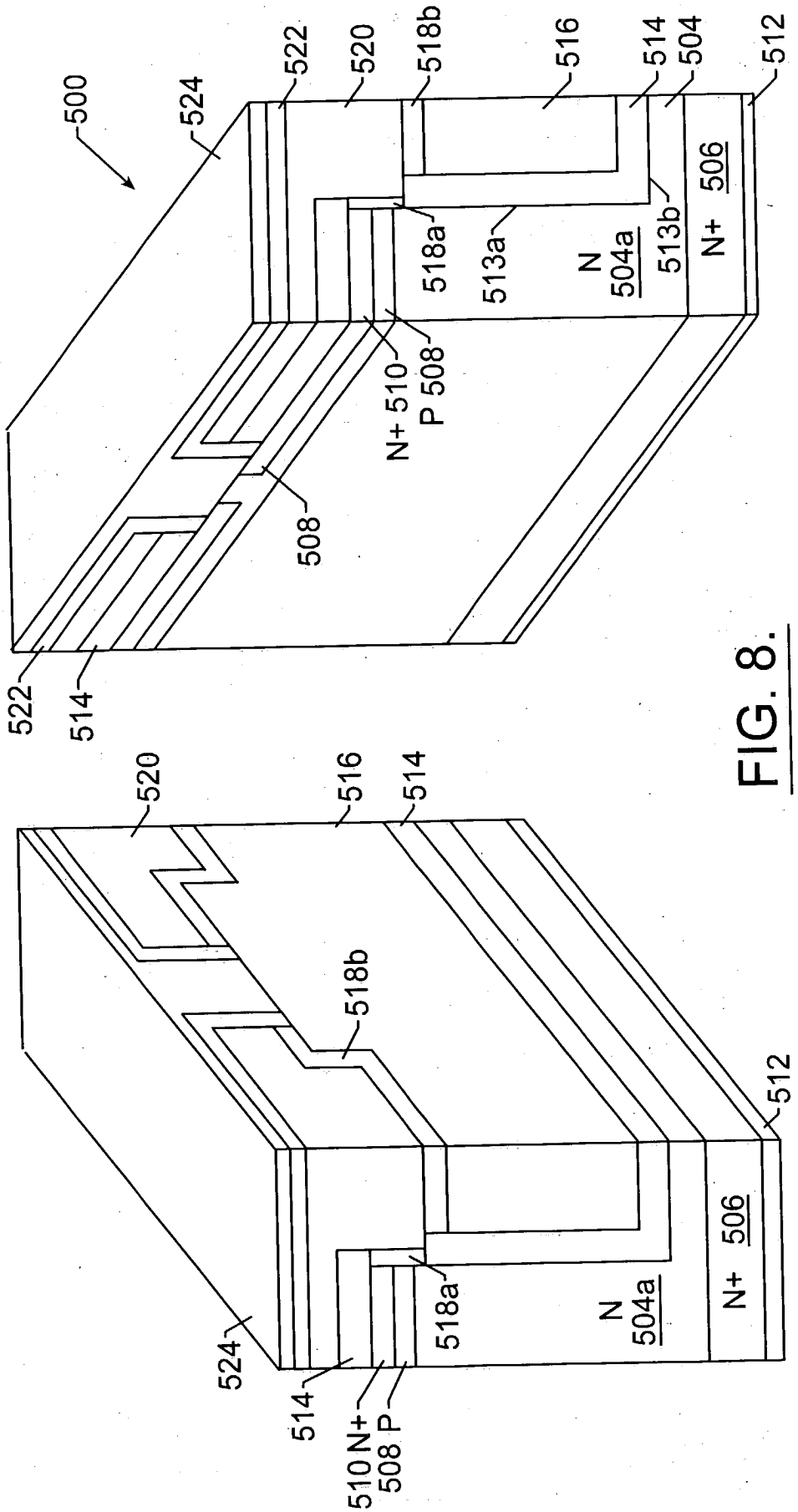

500
524
522
520
518b
516
514
504
512
518a
513a
513b
N
504a
N+ 506
N+ 510
P 508
508
522
514
520
516
514
518b
512
524
518a
N
504a
N+ 506
514
510 N+
508 P

FIG. 8.

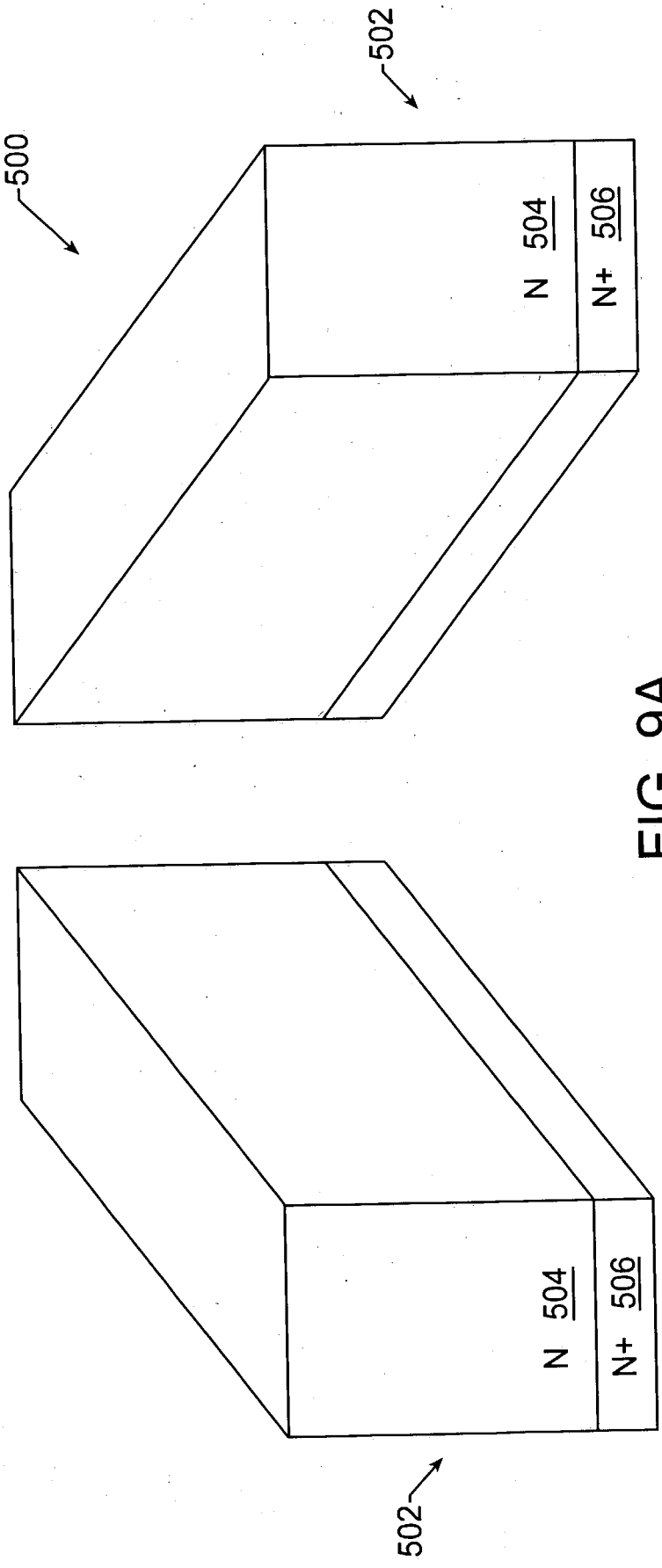


FIG. 9A.

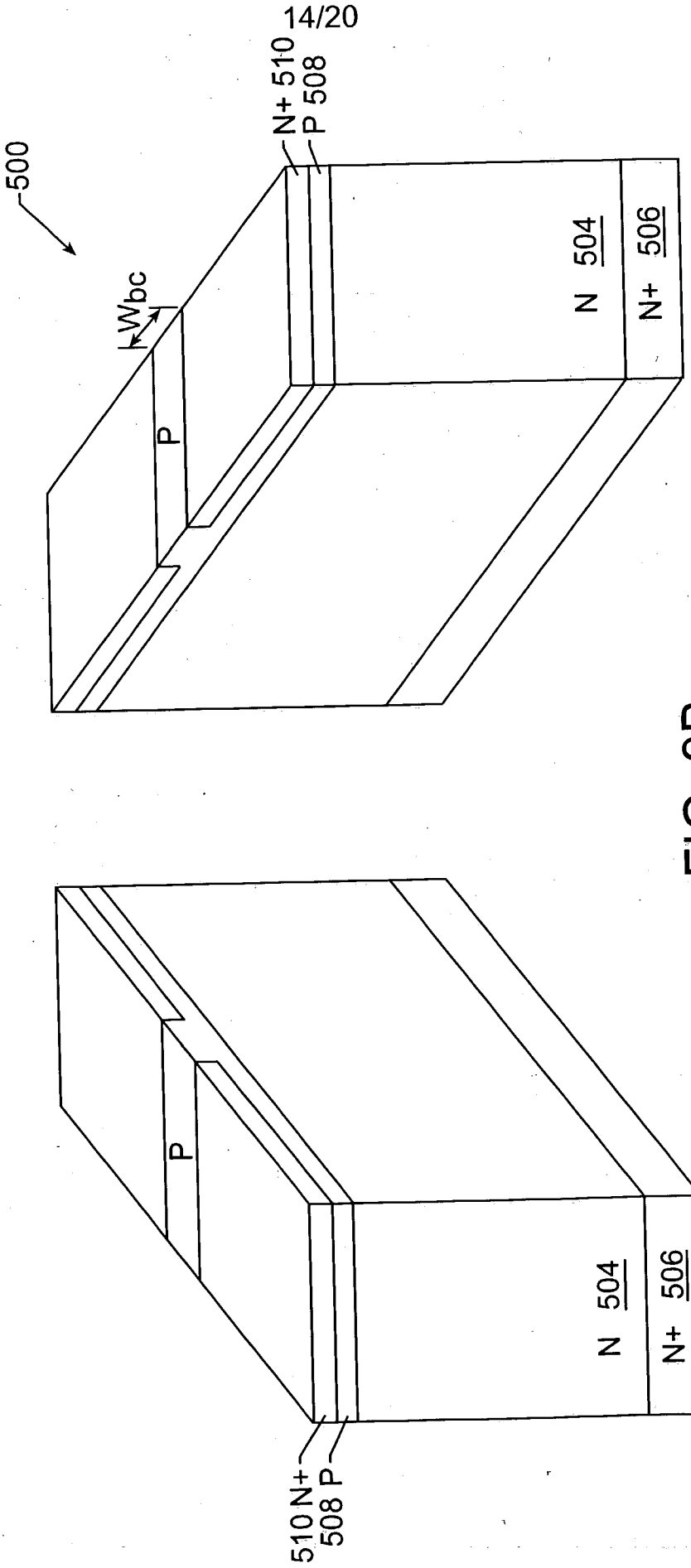
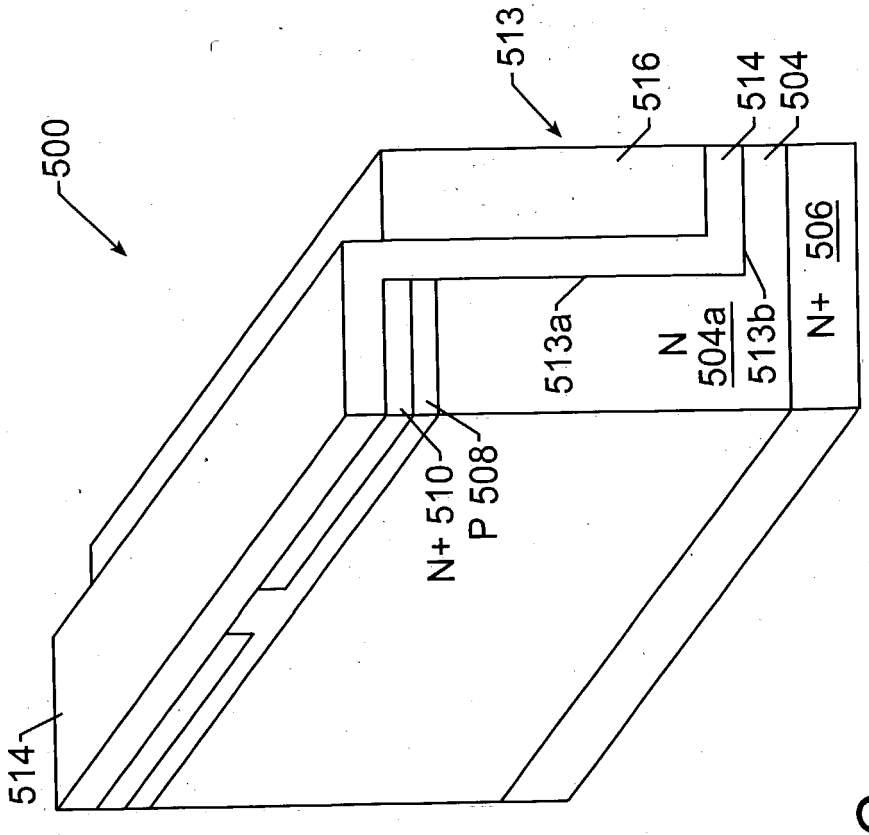


FIG. 9B.


500
513
516
514
504
513a
N
504a
513b
N+ 506
N+ 510
P 508
514

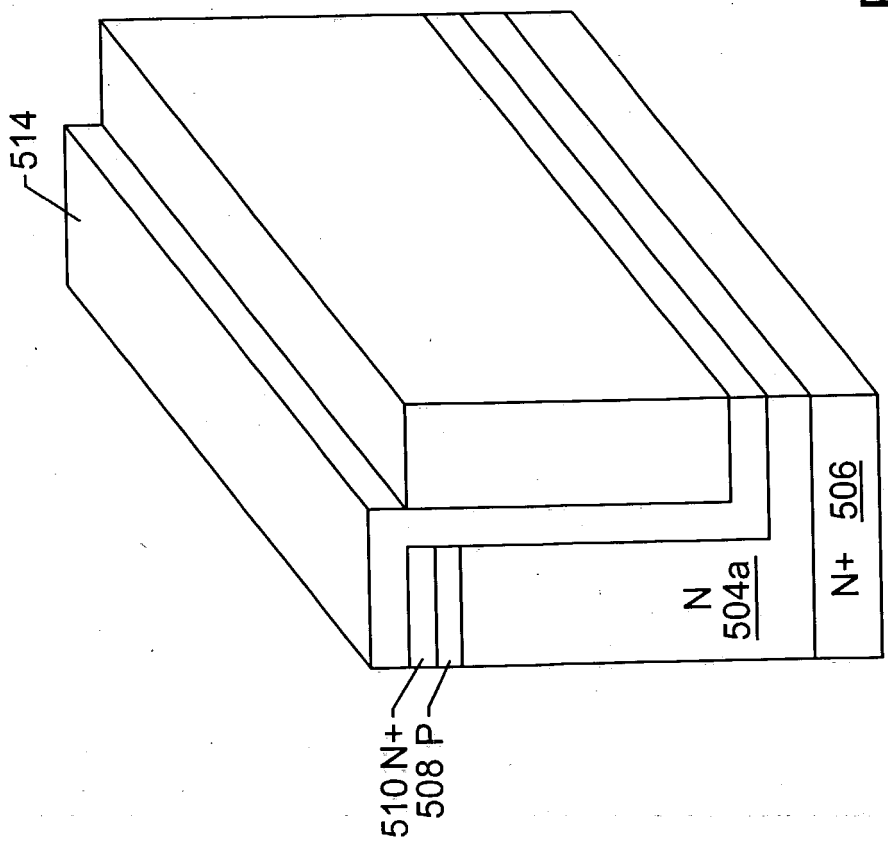

514
N
504a
N+ 506
510 N+
508 P

FIG. 9C.

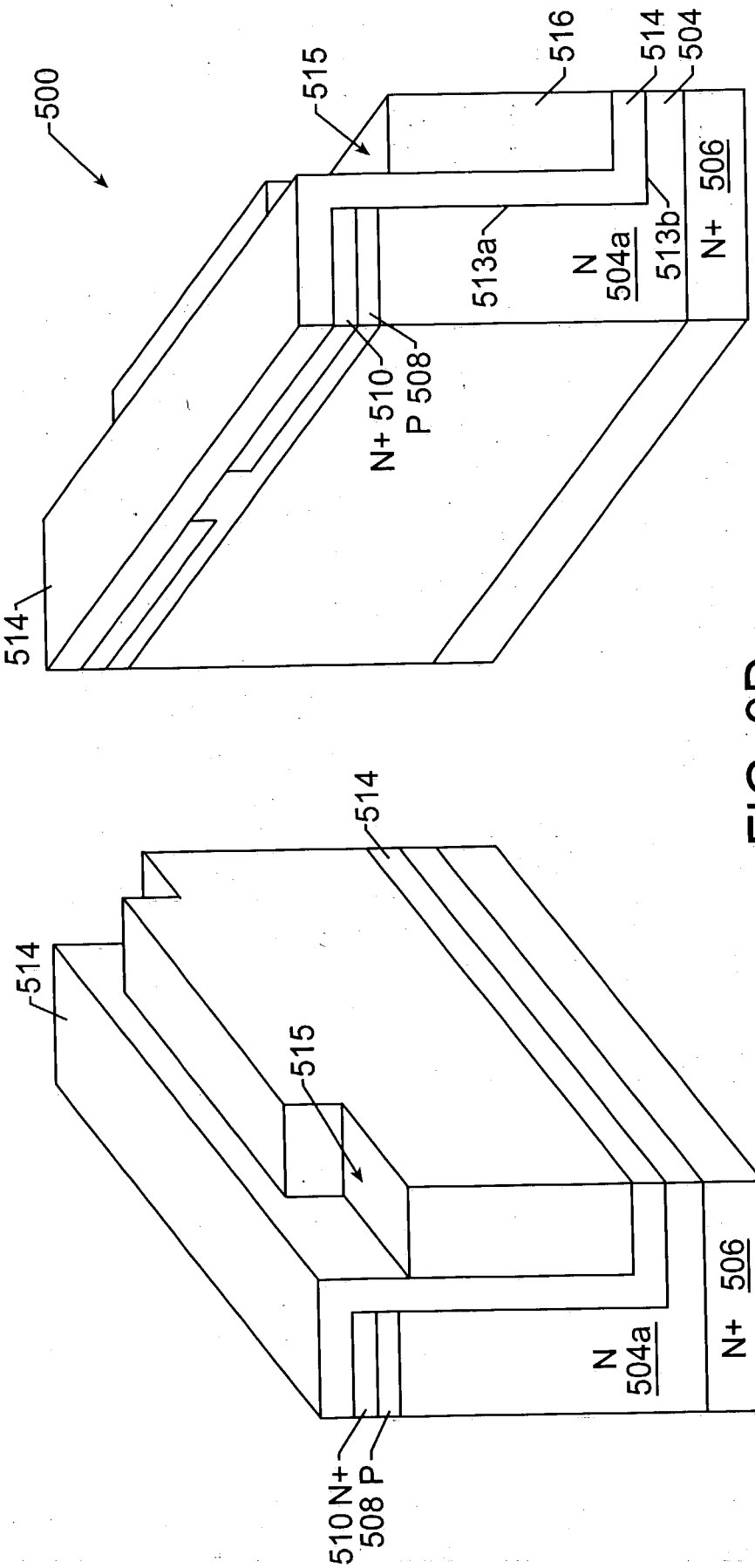

500
515
516
514
504
513a
N
504a
513b
N+ 506
N+ 510
P 508
514
514
515
514
N
504a
N+ 506
510 N+
508 P

FIG. 9D.

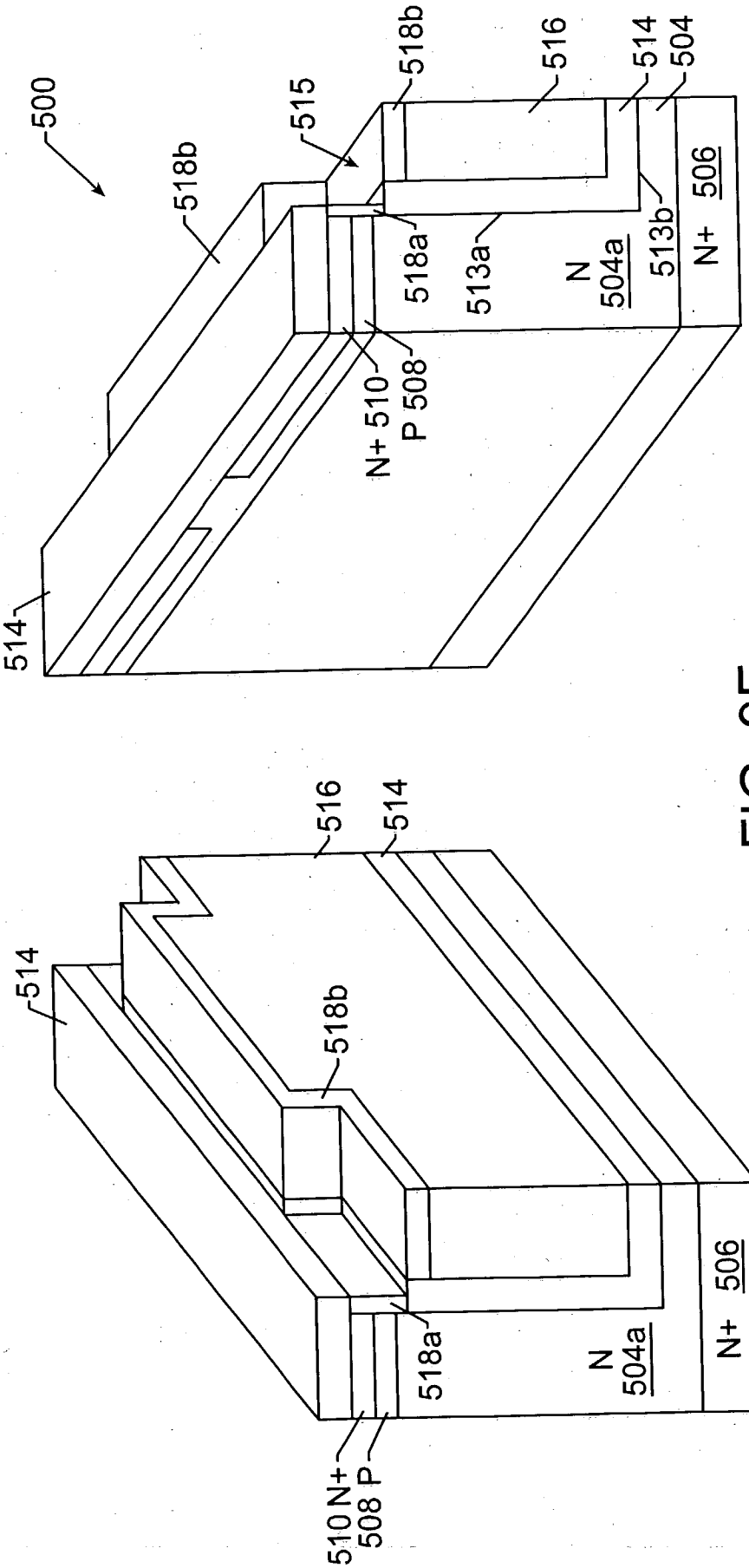

500
518b
515
518b
516
514
504
514
N+ 510
P 508
518a
513a
N
504a
513b
N+ 506
514
516
514
518b
518a
N
504a
N+ 506
510 N+
508 P

FIG. 9E.

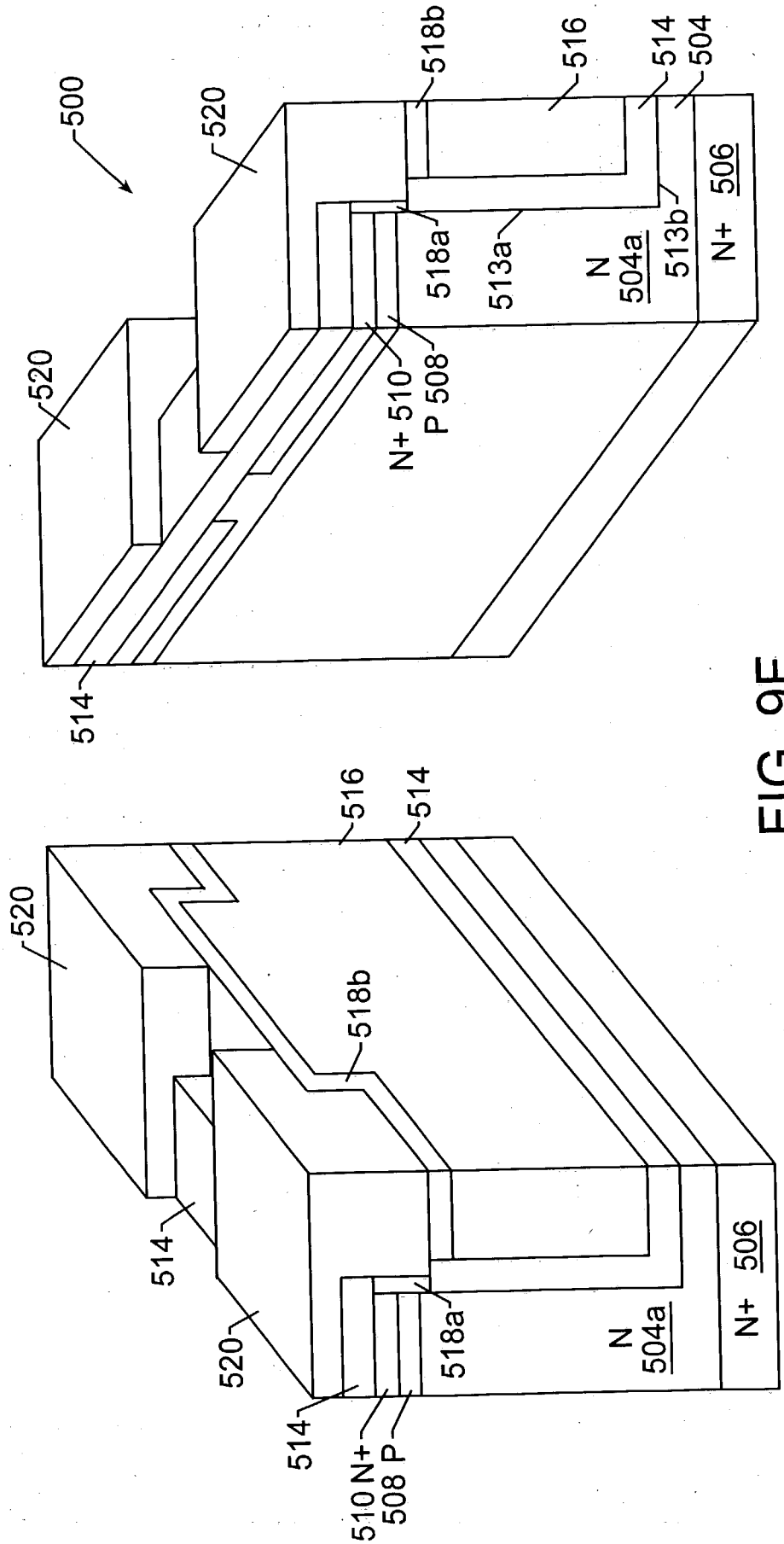

500
520
518b
516
514
504
520
518a
513a
N
504a
513b
N+ 506
N+ 510
P 508
514
516
514
520
518b
514
520
518a
N
504a
N+ 506
514
510 N+
508 P

FIG. 9F.

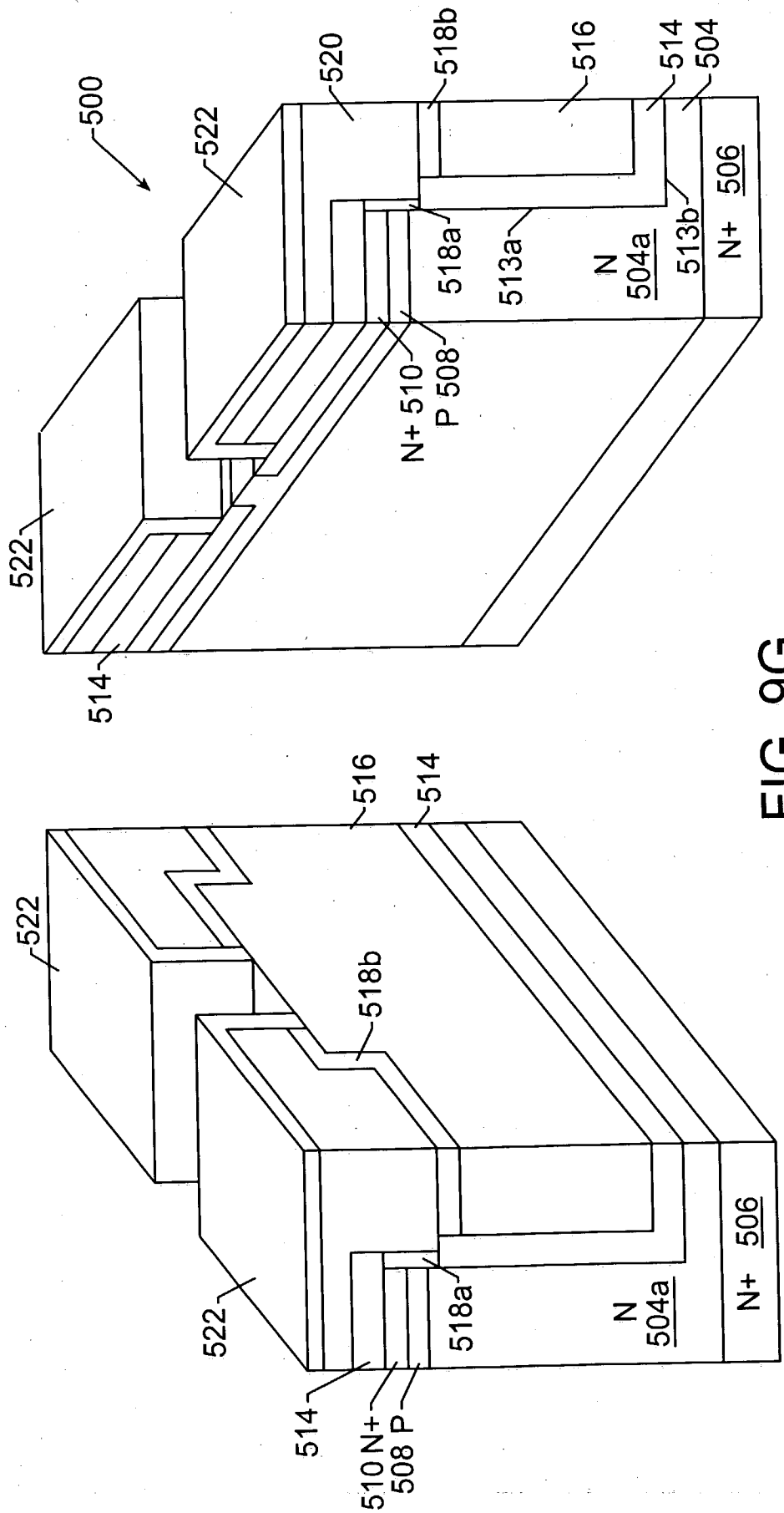

500
522
520
518b
516
514
504
518a
513a
513b
N
504a
N+ 506
N+ 510
P 508
514
522
516
514
522
518b
518a
N
504a
N+ 506
514
510 N+
508 P
522

FIG. 9G.

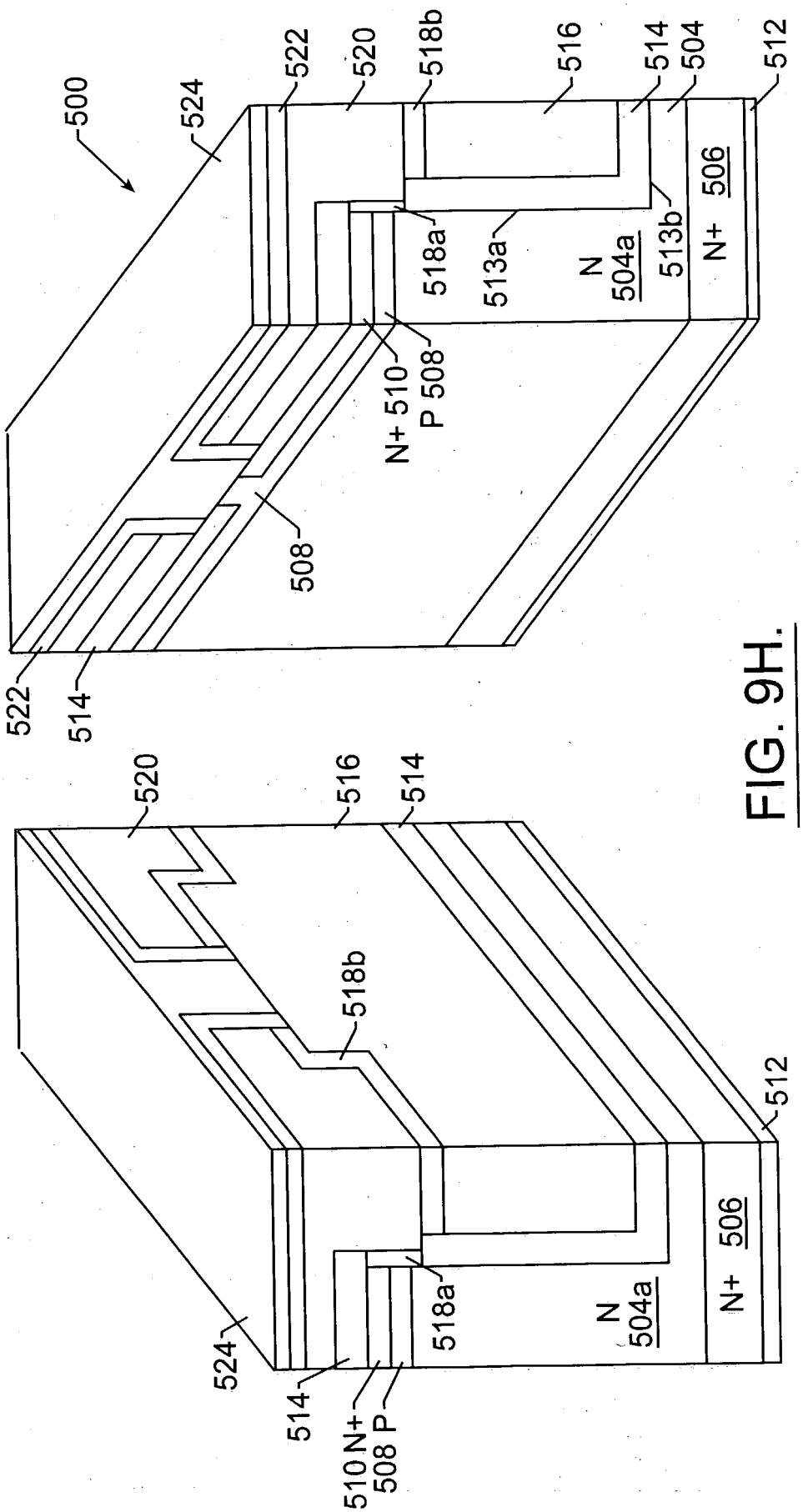

500
524
522
520
518b
516
514
504
512
518a
513a
513b
N
504a
N+ 506
N+ 510
P 508
508
522
514
520
516
514
518b
512
524
518a
N
504a
N+ 506
514
510 N+
508 P

FIG. 9H.